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**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**  
**BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES**

APPLICANT: Dick Holthaus

SERIAL NO. 09/816,054

FILED: March 21, 2001

FOR: Method and Apparatus for Operating a Multistage Cascade Washer

EXAMINER: Saeed T. Chaudhry

Group: 1746

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Commissioner for Patents  
P.O. Box 1450  
Alexandra, VA 22313-1450

**BRIEF ON APPEAL**

Sir:

This is a brief in support of an appeal from the Final rejection of claim 5 by the Examiner.

The Commissioner is hereby authorized to charge the fee required under 37 C.F.R. § 1.17(c) in the amount of \$330.00 and any additional fee which may

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be required or credit an overpayment to our Deposit Account No. 50-0955. A duplicate of this sheet is enclosed.

I. **REAL PARTY IN INTEREST**

The real party in interest is the assignee, a German company SMS Demag Aktiengesellschaft.

II. **RELATED APPEALS AND INTERFERENCES**

None.

III. **STATUS OF CLAIMS**

The present application was filed with four (4) claims, namely, claims 1-4. During the prosecution, claims 1-4 were canceled, and claims 5-8 were added. Subsequently, claims 6-8 were canceled, with the subject matter of claim 6 having been added to claim 5. Claim 5 is now present in the application for appeal purposes.

IV. **STATUS OF AMENDMENTS**

The Final Office Action was issued on April 3, 2003. The Examiner rejected claims 7-8 under 35 U.S.C. § 102(b) as being anticipated by Yano,

evd., U.S. Patent No. 4,319,930 (Yano). Claims 5-6 were rejected under 35 U.S.C. §103(a) as being unpatentable over Yano in view of Hodsden et al., U.S. Patent No. 3,938,214 (Hodsden).

In response to the Final Office Action, a Rule 116 amendment was timely filed (with one-month extension of time), which canceled claims 6-8 and submitted an amended claim 5. The Rule 116 amendment was entered upon filing of the Notice of Appeal.

## V. SUMMARY OF THE INVENTION

The present invention, as defined by claim 5, relates to a method of operating a counterflow cascade washer (1) for wet-chemical treatment of a surface of a metal strip (4) and to be located downstream of one of treatment means and aftertreatment means of a metal strip treating installation (the paragraph replacing the paragraph bridging pages 7-8, lines 1-3, Fig. 1). The counterflow cascade washer (1) includes a plurality of washer units ( $n, n+1, \dots, n+3$ ) each having means (6,7) for connecting a respective washer unit with a fresh water supply and a rinsing water circuit (I-IV) (*ibid*, lines 3-10, Figs. 2,1). The method comprises the steps of branching a portion of a water

flow, which circulates through a rinsing water circuit associate with each of the washer units, off in form of a bypass stream, feeding the bypass stream to a washer unit located immediately upstream of a respective washer unit for additionally rinsing the metal strip in the immediately upstream washer unit with a rinsing water containing a smaller concentration of foreign additives than a rinsing water with which the metal strip is first treated in the immediately upstream washer unit (*ibid*, lines 11-19, Fig. 1). The bypass stream at an end of the immediately upstream washer unit is divided (with a nozzle arrangement and the divided water stream is fed to locations above and below the metal strip (*ibid*, lines 20-23, Figs. 1-2).

## VI. ISSUES

As noted above, claim 5 was rejected under 35 U.S.C. § 103(a) as being unpatentable over Yano in view of Hodsden. The issue under consideration is whether the combination of Yano and Hodsden is obvious and, in the affirmative, whether it indeed make the present invention, as defined by claim 5, unpatentable.

## VII. GROUPING OF CLAIMS

A single claim, namely, claim 5 is pending in the subject application.

## VIII. ARGUMENTS

As discussed above, the Examiner rejected claim 5 as being unpatentable over Yano in view of Hodsden, asserting that it would have been obvious to use the structure of Yano for treatment of metal strip in view of Hodsden which discloses a wet-chemical treatment of a metal strip. The Examiner asserts that it would have been obvious to expect that the apparatus of Yano can be use for rinsing metal strip and that it would give better rinsing results (Final Office Action, page 4, last paragraph).

Apellant respectfully disagrees with this assertions. There is no suggestion in Yano that its structure can be used for rinsing a metal strip, no there is any support for the statement that the structure of Yano would provide better results than that of Hodson.

It is respectfully submitted that a *prima facie* case of obviousness has not been made. Even if Yano and Hodsden could be construed to disclose certain matter as contended by the Examiner, no disclosure or suggestion in either

Yano and Hodsden can be found which should lead a skilled artisan to combine their various features. That separate features of different reference may not properly be combined in the absence of some specific teaching that they should or could be so combined, as such well-settled law that it hardly need be repeated here. See e.g., *In re Fritch*, 23 U.S.P.Q. 2d 1780, 1783 (Fed. Cir. 1992) (footnote omitted). See also *In re Sernaker*, 217 U.S.P.Q. 1, 6 (Fed. Cir. 1983); *SmithKline Diagnostics, Inc. v. Helena Laboratories Corp.*, 8 U.S.P.Q. 2d 1468, 1475 (Fed. Cir. 1988); *In re Laskowski*, 10 U.S.P.Q. 2d 1397, 1399 (Fed. Cir. 1989); *In re Fine*, 5 U.S.P.Q. 2d 1596, 1598 (Fed. Cir. 1988).

It is respectfully submitted that a mere assertion by the Examiner that the combination would have been expected to provide better results is not enough for finding obviousness.

The case law holds that:

The teaching or suggestion to make the claimed combination and the reasonable expectation of success *must both be found* in the prior art, not in applicant's disclosure (emphasis added). *In re Vaeck*, 20 U.S.P.Q. 2d 438 (Fed. Cir. 1991).

Even assuming, arguendo, that Yano and Hodsden could be combined, the combination still would lack the steps of (i) branching of step of portion of portion of a water flow, which circulates through a rinsing water circuit associated with each of the washer units, off in form of a bypass stream; (ii) feeding the bypass stream to a washer unit located immediately upstream of a respective washer unit for additionally rinsing the metal strip in the immediately upstream washer unit with a rinsing water containing a smaller concentration of foreign additives than a rinsing water with which the metal strip is first treated in the immediately upstream washer unit; and (iii) dividing the bypass stream at an end of the immediately washer unit and feeding the divided water stream to locations above and below the metal strip.

According to the present invention, a single bypass steam is fed (through the bypass conduit 10) to the end of an immediately upstream washer unit and is there divided at the nozzle arrangement (11), with the divided water streams being fed to locations above and below a metal strip (through blast pipes 11a, 11b, Fig. 2).

In Yano, two bypass streams are branched from respective conduits (23, 24) in a downstream washer and are fed to separate single nozzles (41, 41'; 41, 42') in the preceding washer unit located above and below the conveying belt (5). Yano does not disclose dividing a single bypass stream at an end of a preceding washer unit in two streams.

In the Advisory Action (attachment, page 2, the Examiner states that the pump 9 delivers a bypass stream. However, the stream from the pump 9 is the main stream. From which two bypass streams are fed to nozzles 42, 42, respectively.

Hodsden likewise does not disclose the novel features of the present invention.

Since all claim limitations must be considered in an obviousness determination, and since the combination of Yano and Hodsden fails to disclose several of the important and recited elements and features of independent Claim 5, it is respectfully submitted the present invention, as defined by Claim 5, is not rendered obvious by the combination of Yano and Hodsden and is, therefore, patentably defines over said combination.



## CONCLUSION

In view of the above, it is respectfully submitted that the rejection of claim 5 under 35 C.F.R. § 103(a) as being unpatentable over Yano in view of Hodsden is improper, and it is respectfully requested that this rejection be reversed.

Respectfully Submitted,

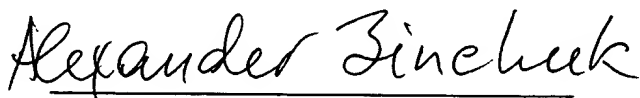


Alexander Zinchuk

Reg. No. 30,541

Dated: October 30, 2003  
Sidley Austin Brown & Wood LLP  
787 Seventh Avenue  
New York, N.Y. 10019  
Tel.: (212) 839-5300

I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail and addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on October 30, 2003.



**APPENDIX "A"**

**Claims on Appeal:**

5. A method of operating a counterflow cascade washer for wet-chemical treatment of a surface of a metal strip and to be located downstream of one of treatment means and aftertreatment means of a metal strip treating installation, with the counterflow cascade washer including a plurality of washer units each having means for connecting a respective washer unit with a fresh water supply and a rinsing water circuit, the method comprising the steps of branching a portion of a water flow, which circulates through a rinsing water circuit associated with each of the washer units, off in form of a bypass stream; feeding the bypass stream to a washer unit located immediately upstream of a respective washer unit for additionally rinsing the metal strip in the immediately upstream washer unit with a rinsing water containing a smaller concentration of foreign additives than a rinsing water with which the metal strip is first treated in the immediately upstream washer unit; and dividing the bypass stream at an end of the immediately upstream washer unit and feeding the divided water stream to locations above and below the metal strip.

**APPENDIX "B"**

**Cases Relied Upon:**

1. *In re Fritch*, 23 U.S.P.Q. 2d 1780, 1783 (Fed. Cir. 1991).
2. *In re Seznaker*, 217 U.S.P.Q. 1,6 (Fed. Cir. 1983).
3. *Smithklein Diagnostics, Inc. v. Helena Laboratories Corp.*, 8 U.S.P.Q. 2d 1468, 1475 (Fed. Cir. 1998).
4. *In re Laskowski*, 10 U.S.P.Q. 1397, 1399 (Fed. Cir. 1989).
5. *In re Fine*, 5 U.S.P.Q. 2d 1596, 1598 (Fed. Cir. 1988).
6. *In re Vaeck*, 20 U.S.P.Q. 2d 1438 (Fed. Cir. 1991).